



SA-01-89

DATE: January 24, 1989

TO: Distribution

FROM: 429/Safety Manager, Head, Safety Engineering Branch,
SSQRD

SUBJECT: MTS Systems Welded-End Accumulators

LaRC has been informed by MTS Systems Corporation that equipment purchased during the years 1969 to 1982 may have hydraulic accumulators with fatigue cracks that could pose a significant safety hazard.

MTS has discovered such fatigue cracks in the housing of welded-end accumulators purchased during this period from Hydrodyne Industries, a former MTS supplier. These cracks present two potential hazards: 1) the pressure cylinder may completely separate and become a flying projectile and 2) there may be high velocity or high volume leakage of hydraulic fluid.

THESE WELDED-END ACCUMULATORS SHOULD BE DEEMED TO HAVE REACHED THE END OF THEIR USEFUL LIFE AND SHOULD BE REPLACED.

If your facility has MTS equipment purchased in the aforementioned time period, take the following actions:

1. Turn off the system hydraulic and electrical power. Allow the hydraulic pressure to drop to zero.

WARNING

System hydraulic pressure must be at zero to minimize the possibility of damage to equipment or injury to personnel. If system pressure cannot be reduced to zero, contact the Safety Office at extension 43367.

SA-01-89

2. Examine the fluid end of the accumulator for a weld (see Figure 1). If a weld is present, proceed with steps 3-4.

WARNING

Any fatigue crack which may be developing in the accumulator weld will not necessarily be externally visible. The presence or absence of a crack should never be used as a criteria for whether or not to replace the accumulator.

3. Completely discharge the nitrogen pre-charge in the accumulator. Remove the gas valve and discard.
4. Contact the Safety Office at extension 43367 for further directions.

Replacement of these accumulators is being coordinated through the Safety Office.

Your immediate response to this Safe-Alert is requested.

V. William Wessel
V. William Wessel
43367

Distribution:
Facility Safety Heads
Facility Coordinators
Contractor Safety Reps.

429/WCH *A*

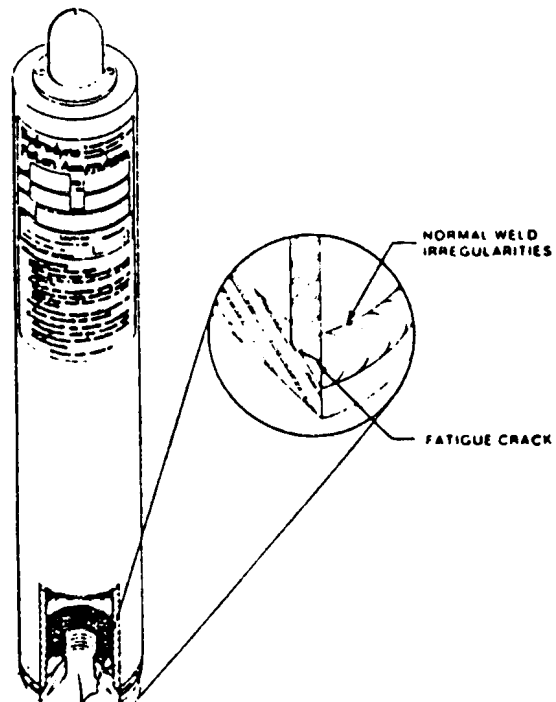


FIGURE 1
TYPICAL WELDED ACCUMULATOR